

Communicable Disease Control under Health Care Reform: “The Perfect Storm”

DHMH TB Control and Prevention Annual Update
March 20, 2014

Patrick Chaulk MD, MPH
Acting Deputy Commissioner for Disease Control
Baltimore City Health Department

Outline

- Briefly review HCR and how it impacts funding for communicable disease control
- Identify concerns about communicable disease control under HCR
- Evidence-based medicine and public health
- Next steps

TB Reminder

- TB is essentially a disease of the poor ¹
 - Roughly 1/3 of the world's population is infected with TB
 - But low and lower middle income countries account for 90% of new cases
 - And low income countries account for 65% of TB cases and 71% of TB deaths
- TB produces a vicious cycle of poverty
 - Begins with poor households and poor nations
 - Average TB patient loses 3-4 months work; lost earnings can total 30% average annual income
 - Overall this reduces a country's labor force and GDP
 - 10 million orphaned children due to TB (2010)

TB Roadmap: 2000 I.O.M. Report 1

- Maintain TB control
- Accelerate the decline of TB
- Develop new tools
- Increased global U.S. actions
- Assess the impact of this report

What does communicable disease funding look like **at** BCHD

- Ryan White: HIV Care
 - Clinical care; support services
- STD Clinical services
- CDC: HIV Prevention
 - Prevention with Positives
 - Linkage to care
 - Partner services
 - Condom Distribution; Policy; Social marketing
- Community Harm Reduction
 - Syringe exchange; Staying Alive; Wound care
- Tuberculosis

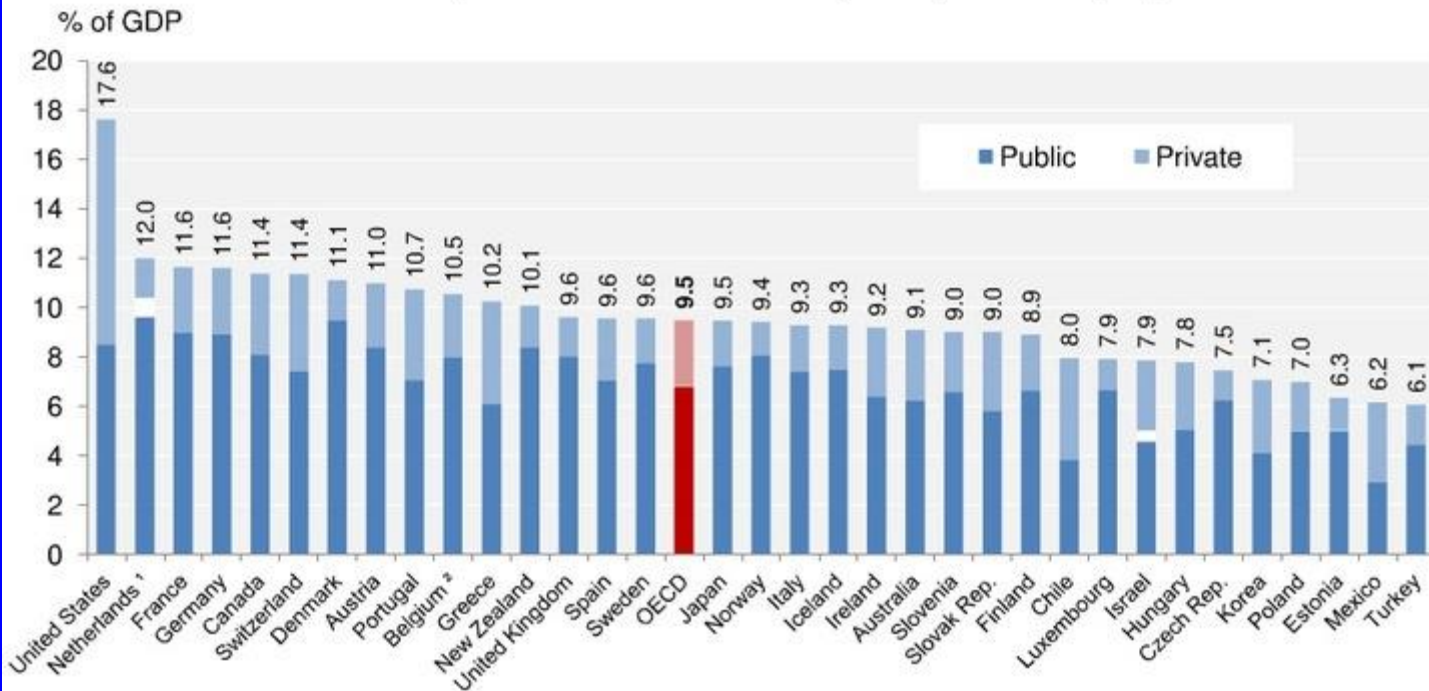
What's the impact of HCR on communicable disease funding locally

- History of flat federal funding and cuts
 - STD
 - TB
- Recent trends in federal “sequestration”
 - Ryan White (partial funding)
 - STD prevention
 - Reduction in direct assignees
- Affordable Care Act
 - Expanded coverage and patient protections
 - But expanded coverage does not.....
 - ACA DOES NOT MEAN UNIVERSAL HEALTH CARE COVERAGE

ACA goal: Control health care spending

At 17.6% of GDP in 2010, US health spending is one and a half as much as any other country, and nearly twice the OECD average

Total health expenditure as a share of GDP, 2010 (or nearest year)



1. In the Netherlands, it is not possible to clearly distinguish the public and private share related to investments.

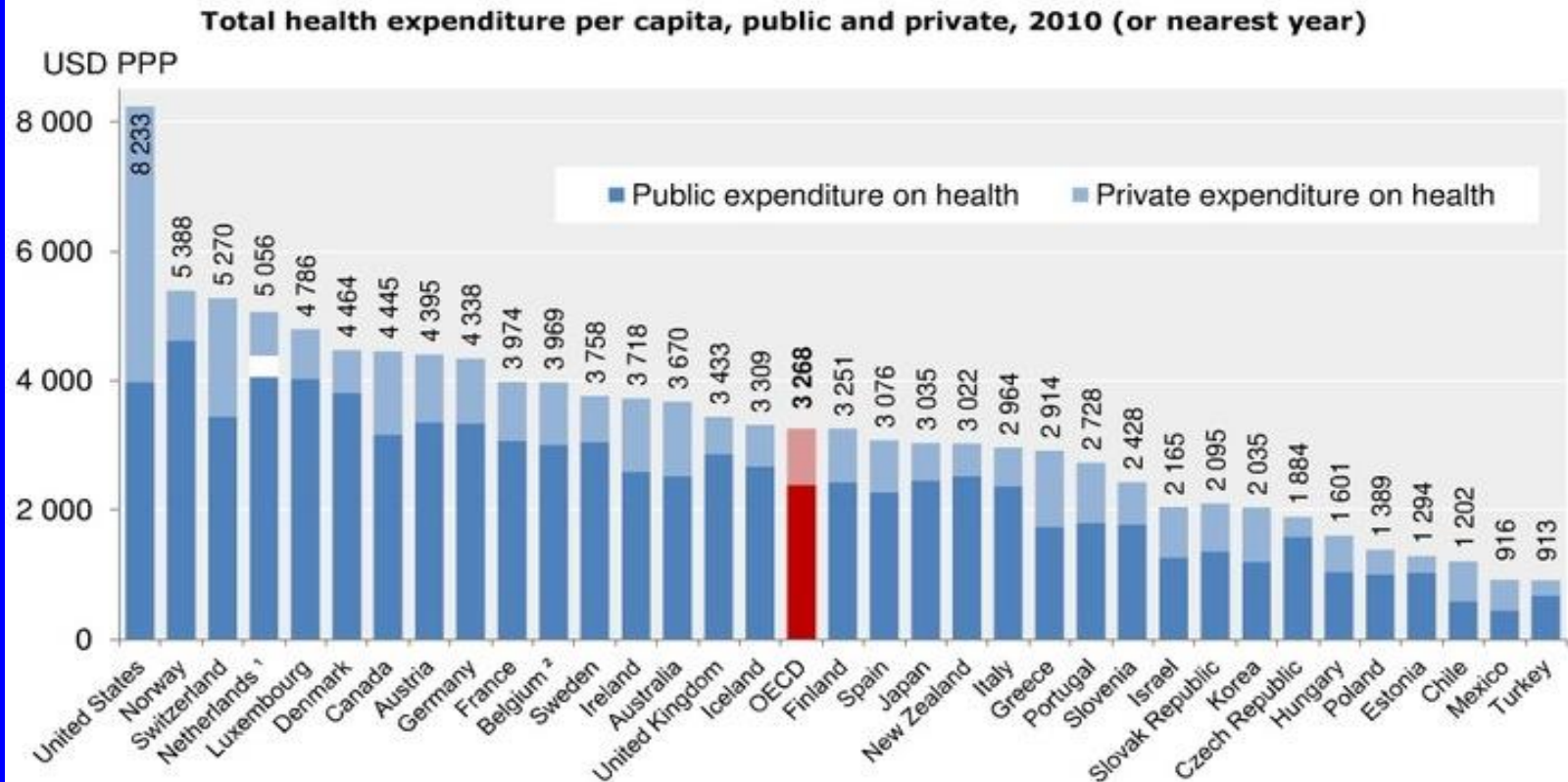
2. Total expenditure excluding investments.

Information on data for Israel: <http://dx.doi.org/10.1787/888932315602>.

Source: OECD Health Data 2012.

ACA goal: Control health care spending

US spends two-and-a-half times the OECD average



1. In the Netherlands, it is not possible to clearly distinguish the public and private share related to investments.

2. Total expenditure excluding investments.

Information on data for Israel: <http://dx.doi.org/10.1787/888932315602>.

Source: OECD Health Data 2012.

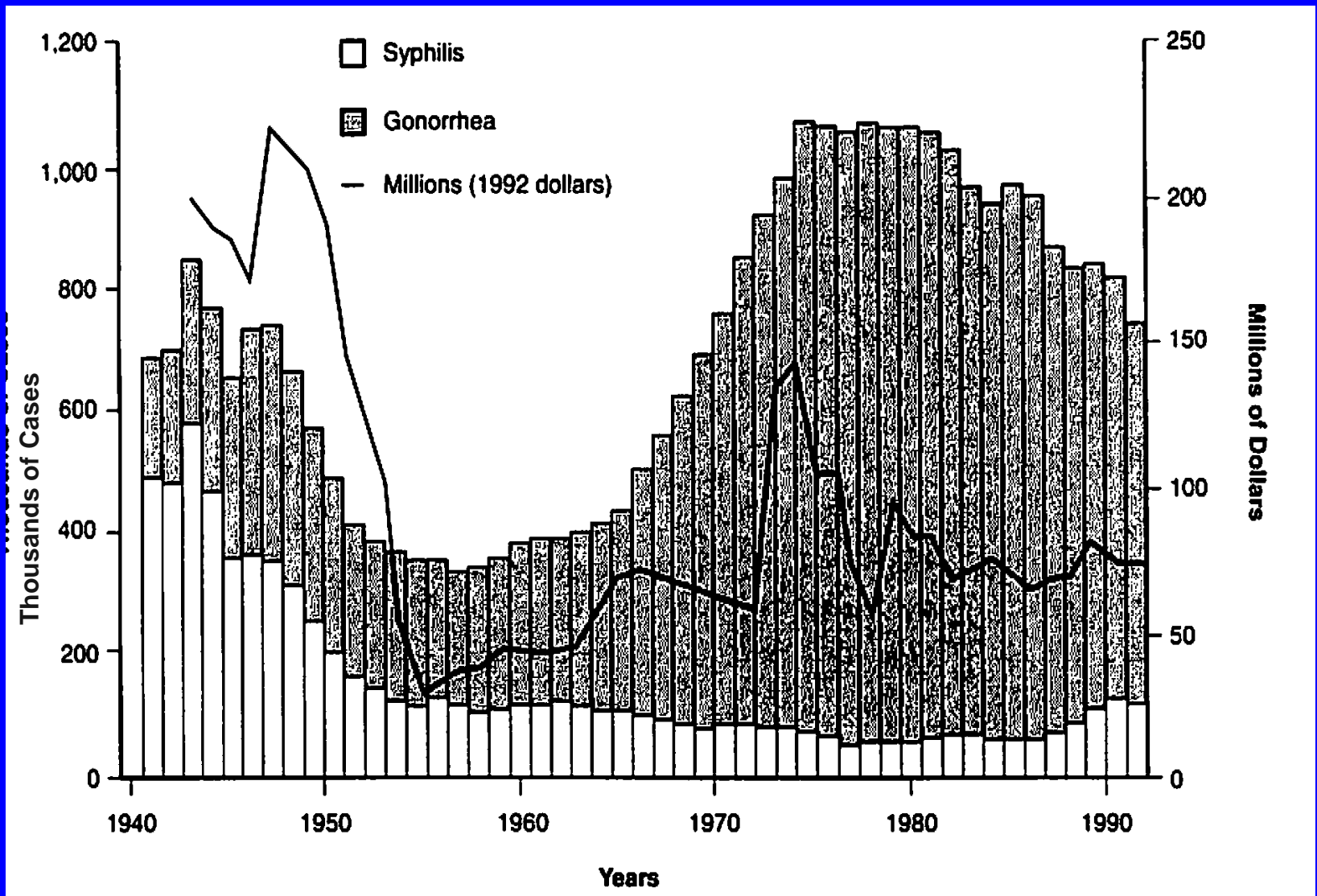
Coverage concerns under HCR

- Assumptions:
 - Everyone will have coverage
 - What about access
 - What about quality
 - Expanded coverage means payment for private sector treatment of TB, HIV, and STDs
 - Will this justify further federal cuts in categorical programs to avoid double coverage
 - “Brown’s Law”

Brown's Law

No public health effort in modern times demonstrates more dramatically than the control of syphilis the results of failure to follow through on a successful program, the results of reliance on 'miracle' drugs rather than on case finding and proven public health practices, and the results of overhasty budget reductions...*Past experience with premature reductions in budgets has been followed by increases in cases and must be avoided.*

Brown's Law graphically



Chaulk CP, Zenilman J. Sexually transmitted disease control in the era of managed care: "Magic Bullet" of "Shadow on the Land" J Public Health Management Practice, 1997; 3(2): 61-78.

Quality concerns under HCR

- Providing clinically effective care in the private sector
 - Clinician training in STD/HIV/TB diagnosis and treatment
 - Medical education training gaps
 - Medical errors in private sector care for TB/HIV/STD
 - BCHD TB Program versus private sector 1
 - Errors:
 - Inappropriate initial regimens (too few or wrong combinations)
 - Inadequate dosing
 - Inadequate length of therapy
 - Findings:
 - » 3% versus 38%
 - Similar findings in New Jersey
 - Iseman study 2
- Provide culturally effective care in the private sector

1 Rao et. Al.. Errors in the treatment of tuberculosis in Baltimore. *Chest* 2000; 117:3.734

2 Mahmoudi A, Iseman MD, Pitfalls in the care of patients with tuberculosis: common errors and their association with the acquisition Of drug resistance. *JAMA* 1993; 270:65-68.

Culturally effective care

Case study: LTBI and the foreign-born
in Seattle

Seattle Cultural Case Managers

- Recruit and train community residents to:
 - Help create effective messages and education strategies
 - Serve as TB field workers and case managers
 - Conduct extensive neighborhood outreach to:
 - Recruit residents for TB testing and therapy
 - Assist with clinic visits, home delivery of medications
 - Conduct at least monthly house calls, twice-a-week phone calls
 - Establish social networks, assist with other needs

Program Performance Measures

- Therapy acceptance rates
- Treatment completion rates
- Referrals for other social services

Seattle's Cultural Case Managers Program 1

- 2,194 immigrants tested 1999 - 2000

- 442 offered treatment

 - 389 (88%) started on treatment

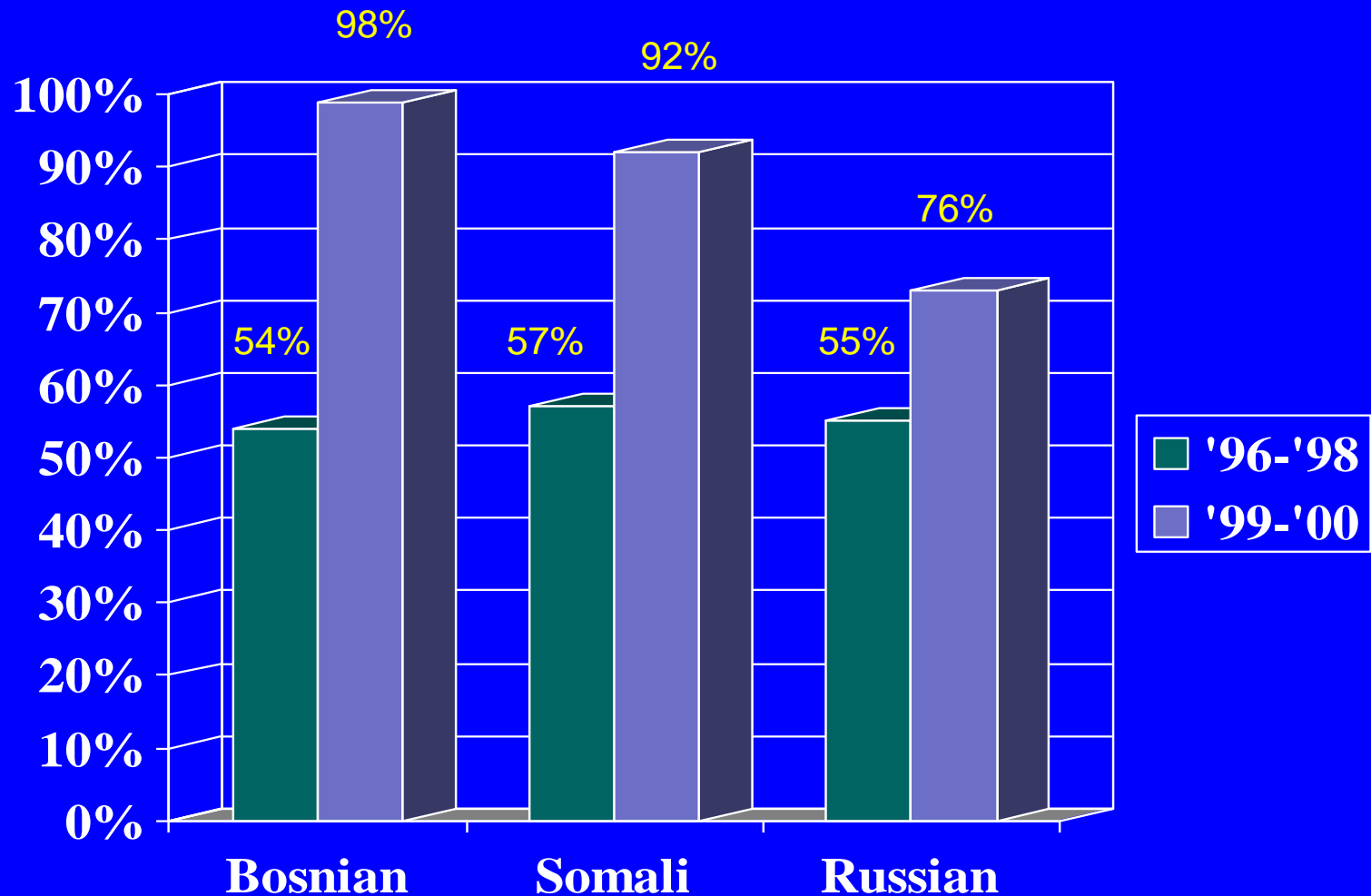
 - 319 (82%) completed 6-9 month regimen
(vs.60% nationally, 37% Seattle)

 - 93% of client encounters also involved
discussions about housing, ESL, mental and
physical health, employment and employment
training, child care, transportation .

1 Cultural case managers in the treatment of latent tuberculosis in the foreign born. *Int J Tub & Lung Dis* 2004;8:76-82 .

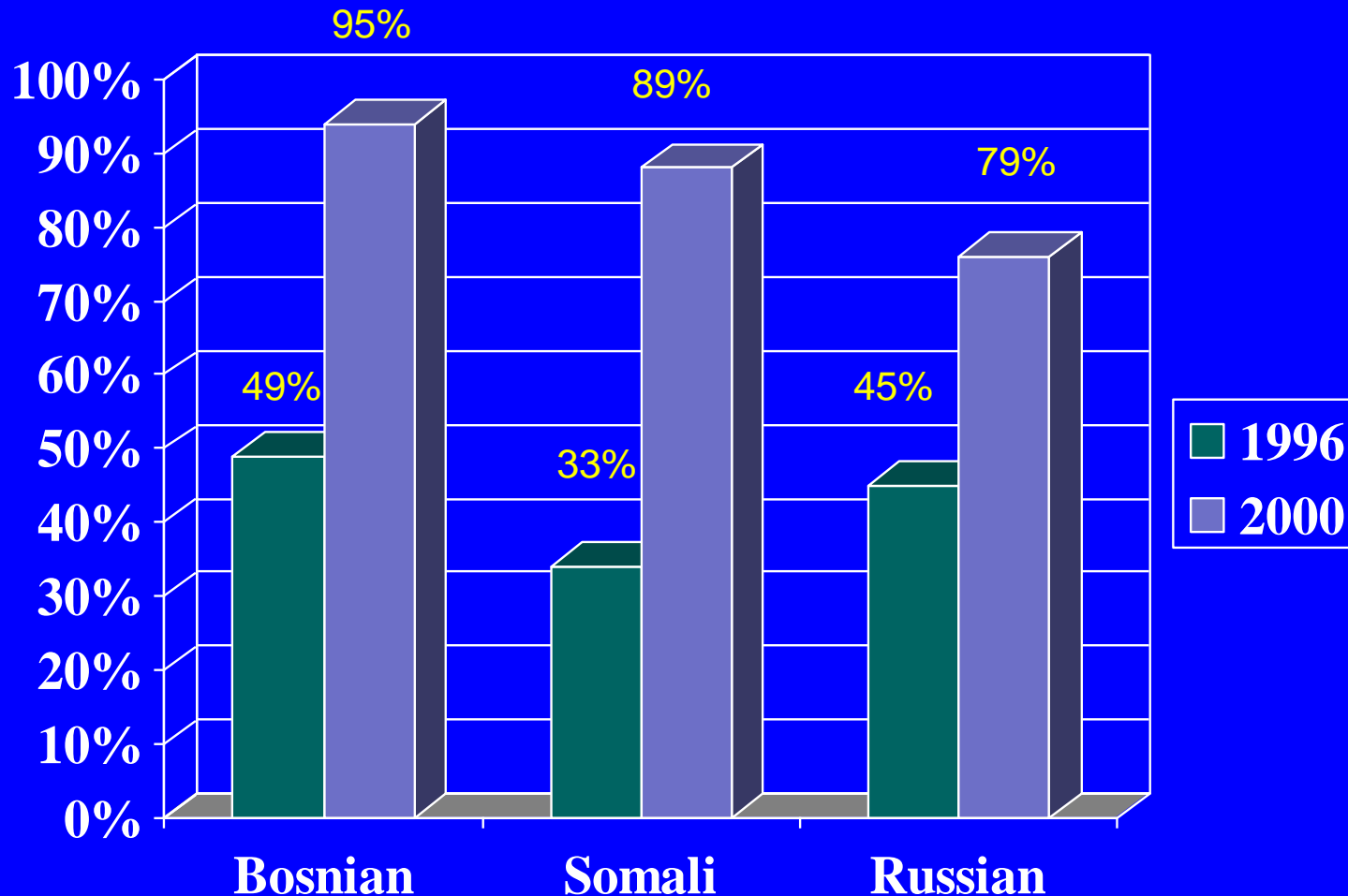
Therapy acceptance rates ('96-'98 vs. '99-'00)

N= 389 (88%)

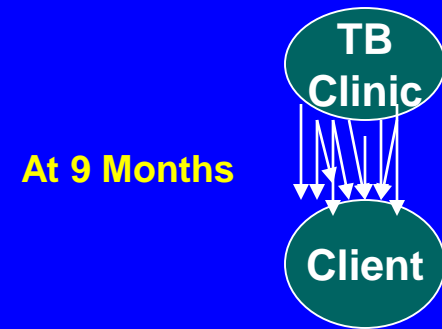
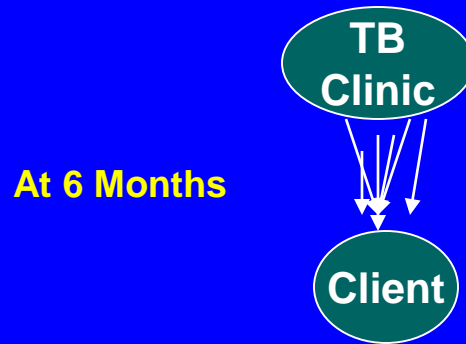
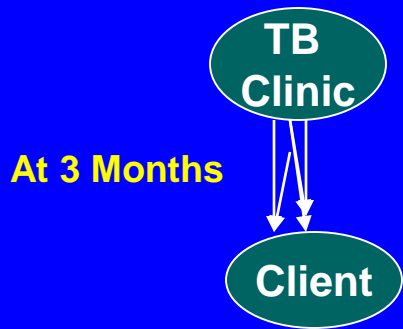


Therapy completion rates ('96-'98 vs. '99-'01)

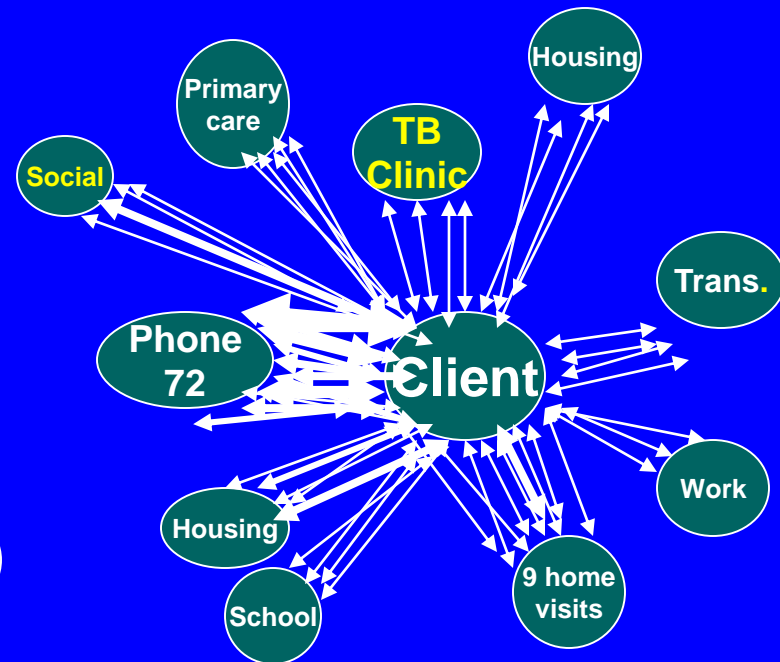
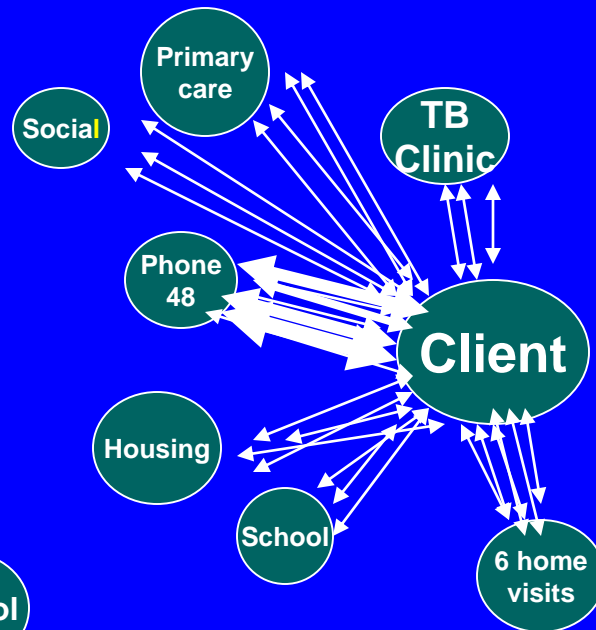
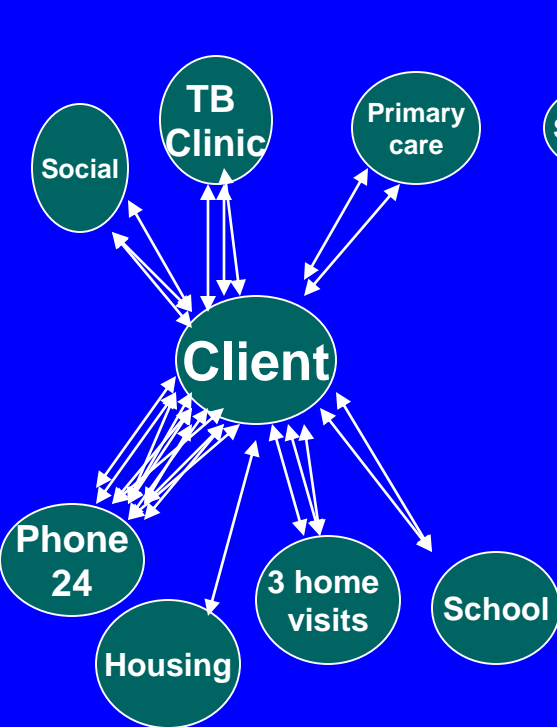
N = 319 (82%)



Social Networks



Traditional TB Clinic Model



Cultural Case Manager Model

Characteristics of Effective CCMs

- Knowledge:
 - Of refugee language beyond mere translation: refugee cultures, customs, beliefs, gender roles, family structure. Creates credible messages.
- Experience:
 - With history of effectively serving the target refugee community. Creates relationships.
- Social standing:
 - Highly regarded in the target refugee community: just “being from the community” is necessary but not sufficient. Creates trusted messengers.
- Capacity:
 - Belief in and ability to explain U.S. medical strategies and its complex health care system. Creates effective education.

Insurance Model Limitations

- Core public health functions not necessarily covered
 - Contact investigation
 - Partner services
 - Disease surveillance
 - No supervised care or outreach
 - Wait times for care common
 - Not designed for population-based screening/care
 - Little population-based communicable disease focus

Other challenges for LHDs under HCR

- Capacity Challenges
 - Credentialing
 - Billing
 - Establishing quality management systems
 - Providing care that is outside LHD scope
 - Staff training
 - Providing capacity building to CBOs
 - Creating collaborative arrangements

Baltimore's ranking for TB among major U.S. cities: 1958 - 1992

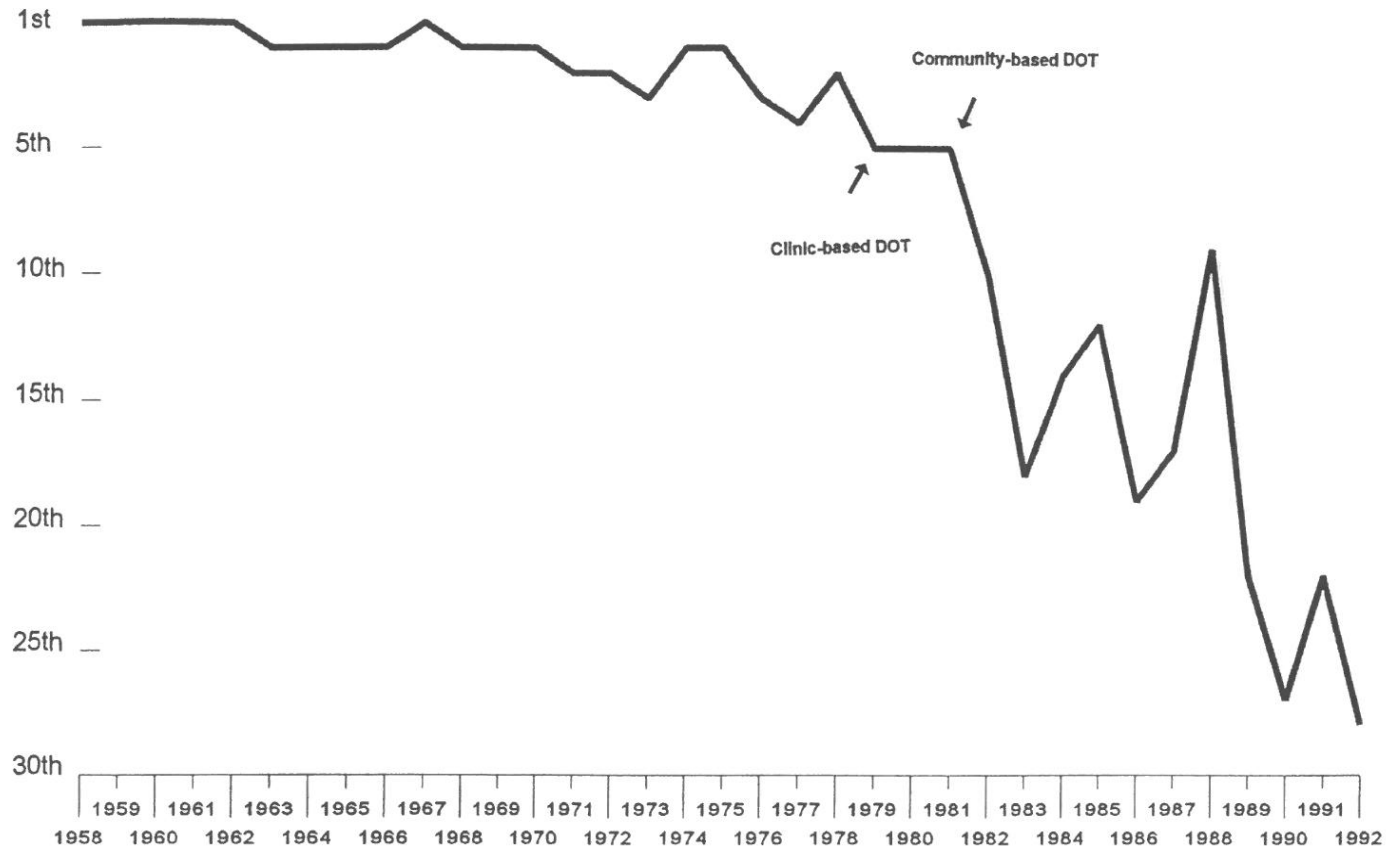
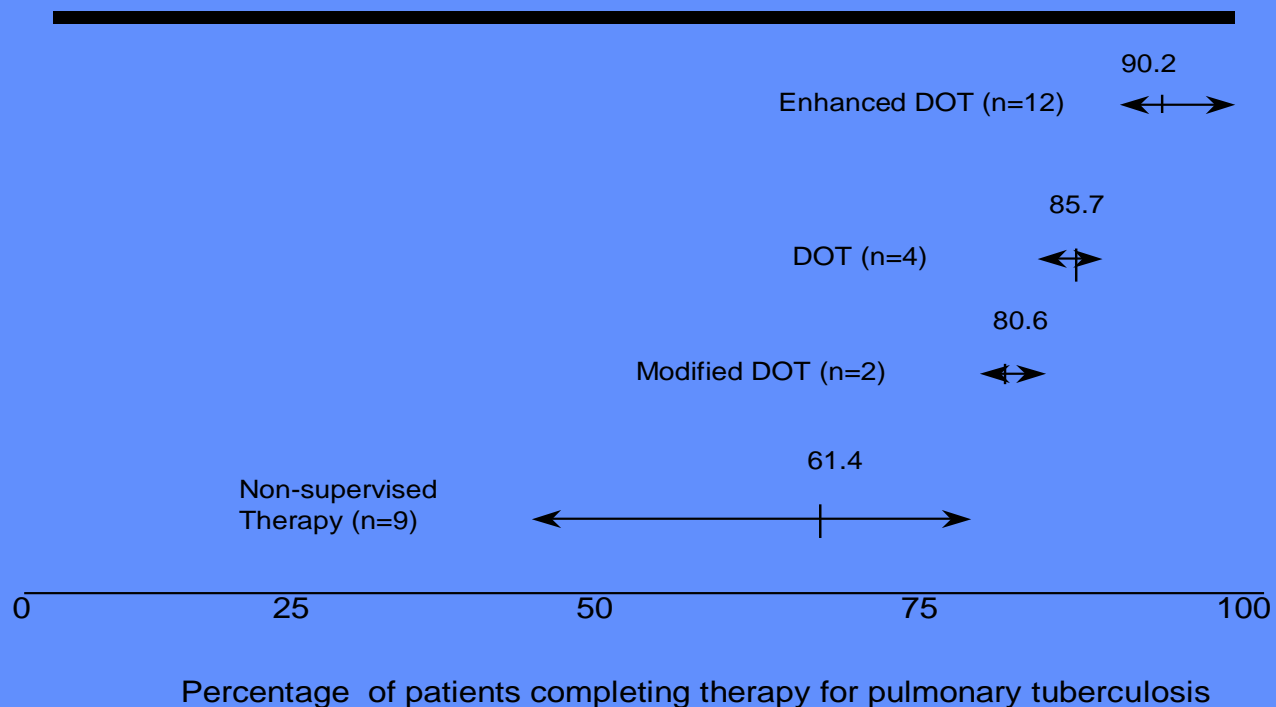


Figure 1 Baltimore's ranking for tuberculosis incidence among all US cities with over 250 000 residents between 1958 and 1992.

Evidence-based medicine and public

Range and median treatment completion rates, by treatment intervention, for pulmonary tuberculosis reported in 27 studies.



Evidentiary Concerns: USPSTF RCT standard and public health

- Theory of Change 1
- Modelling 2
- Anthropological and sociological tools
 - Focus group analyses, social network analyses
- Syndemic relational analyses 3
- Community-based participatory research

1. Change is here. Available at: <http://www.theoryofchange.org>.

2. Chaulk CP, Grady M. Evaluating tuberculosis control programs: strategies, tools and models. *Int J Tuberc Lung Dis*. 2000;4(supp):S55-S66.

3 Singer M. A dose of drugs, a touch of violence, a case of AIDS: conceptualizing the SAVA syndemic. *Free Inquiry*. 1996;24:99-110

Other communicable disease control concerns under HCR

- How to:
 - care for adolescents, especially STIs
 - care for immigrant minority populations
 - ensure access STD/HIV/TB specialists
 - use MIS for better surveillance
 - reduce high voluntary disenrollment
 - improve on low consumer satisfaction
 - overcome diagnostic challenges (TB, syphilis)
 - address confidentiality concerns (EOB)
 - Improve client and community outreach
 - provide effective counseling

Strategies to improve communicable disease under HCR

- Subcontract with PH specialists
 - Public health clinics: TB, STI, HIV,
 - School-based clinics
 - Community and migrant health centers
 - Hire HIV/TB/STI specialists
- Require CME credits in TB/HIV/STI
- Strengthen MIS review
 - Immunization rates, screening rates, UPSTF guidelines adherence, identify preventable hospitalizations/ED visits
- Medical record audits

Next Steps

- Develop a body of evidence on what's effective:
 - Identify current best practices, programs, interventions
 - Theory of change: qualitative + quantitative methods
 - Refine asset mapping
 - All communities have some assets
 - Residents, existing capacity, CBOs/NGOs
 - Develop, refine and field test new models
 - Public private partnerships
 - Provide customized technical assistance
 - Peer-to-peer approaches
 - Clear channels of communication between management and front line staff